



Mr. Belcher's Design for a Church on the Regent's Canal, Paddington.

THE WORK OF THE LATE JOHN BELCHER, R.A.

By J. J. JOASS [F.].

Read before the Royal Institute of British Architects, Monday, 14th December 1914.

IN dealing with the subject of this Paper I feel that I must necessarily be covering ground which is already familiar to most of those here to-night. It is not my intention to add to the eloquent testimonies to Mr. Belcher's memory by many of his colleagues and contemporaries at the time of his death. I propose rather to mark out clearly the successive phases of his career and to shew you in detail some of the more important works by means of lantern slides, describing them shortly as we proceed.

Mr. Belcher was born in 1841 at Trinity Square, Southwark. He spent his life in London, and died last year at no great distance from the place of his birth. He was therefore a true Londoner, and his interests and sympathies were bound up in the city which he loved so well. His father, Mr. John Belcher, was also an architect and surveyor, who practised at No. 5, Adelaide Place, London Bridge. He was an able man of business, with considerable artistic and musical ability. His mother was a direct descendant of William Woollet, the eminent engraver. The Woollets were originally of Dutch origin, and as many of the members of the family had artistic gifts Mr. Belcher's artistic character may have been derived from them. Mr. Belcher spent a year or two at school at Luxembourg, and even at that time gave evidence of a decided bent for sketching and drawing, some of his sketches of the Luxembourg fortifications being engraved in the *Illustrated London News* of 1867.

About the age of twenty-one he spent some time in Paris studying especially modern French architecture, and some of the work done in his father's office soon afterwards bore distinct evidence of

this influence. In the year 1865 he was taken into partnership by his father and commenced an active career as an architect which only terminated with his death.

In forming an estimate of Mr. Belcher's work and of the very considerable influence which he has had on contemporary architecture there is one aspect which should not be lost sight of. His father practised in the City of London at a period when the traditions of Soane, Donaldson, and their school had by no means died out. He was almost entirely unaffected by the Gothic Revival and the teachings of its prophets, not from any inability to appreciate and understand the beauty of Gothic, but from a logical conviction that such work was unsuitable to the requirements of his time, particularly in the class of work he was likely to be engaged upon in London City. He sent his son to Paris to study especially the Renaissance work, and no doubt what he learned at that time affected in a very marked manner the work of his later years. A continuity of thought and tradition was thus preserved from father to son which connected him to an unusual extent with the traditions of the later phases of English Renaissance architecture and specially qualified him to take part in the early manifestations of its revival.

On his return to his father's office the first buildings which bore the mark of the influence of John Belcher, jun., were the Royal Insurance Company's building in Lombard Street and the Commercial Union Assurance Company in Cornhill. Some of the sculpture of the former building was executed by Thomas Thornycroft, the father of the present Royal Academician, and illustrates at that early period the importance which Mr. Belcher attached to the allied arts in connection with architecture, a principle to which he was faithful to the last and which was to have a great effect on his future work.

Notwithstanding the paternal warnings and instruction he soon came under the influence of the Gothic movement, and in fact became one of its most enthusiastic devotees. He was a contemporary of Sedding, and the work of Godwin, Burges, and Street affected him powerfully. The effects of this change are first noticeable in his work at Mansion House Buildings at the corner of Queen Victoria Street and Poultry, now occupied by Messrs. Mappin & Webb, and a small hall for the Carriers' Company, afterwards pulled down and rebuilt by Messrs. Rylands to allow of the extension of their premises (see fig. 1).

During Mr. Belcher's Gothic period such men as Mr. Harry Wilson, Mr. Needham Wilson, and Mr. Beresford Pite were at work in his office, and had he been successful in obtaining a commission for a great public building at this time the result, I have no doubt, would have been notable. This was not to be, however, and most of the work carried out was of a domestic character—as, for example, Stowell Park, a restoration and additions on a large scale for the Earl of Eldon. A special feature of the design is the garden. This drawing [fig. 2] is by Professor Beresford Pite—a pen-and-ink drawing, and a remarkable one of its kind. Other examples are Holcombe, Chatham; Yeldhall Manor, Twyford; Morden Grange, Blackheath; Eyot House, Chiswick Mall, for Sir John Thornycroft; and his own house, Redholm.

These designs were typical of the best domestic architecture of the time when the great mass of such work was exceedingly poor. They reflect strongly the work of Nesfield and Norman Shaw, who, along with a few other pioneers, were the forerunners of the great advance in English Domestic architecture which followed.

A notable feature of nearly every one of these designs is the garden—a subject which specially appealed to Mr. Belcher when the idea of a garden designed by an architect seemed most unusual. This love of gardens continued all through his life, and I will shew you later some further examples of his work in this branch of our art.

Although keenly interested in ecclesiastical architecture Mr. Belcher had few opportunities in this direction, and the most important designs were never carried out. Among these is the design for the completion of Brandon's Gordon Square church. This fine spire [fig. 3] would have been a great

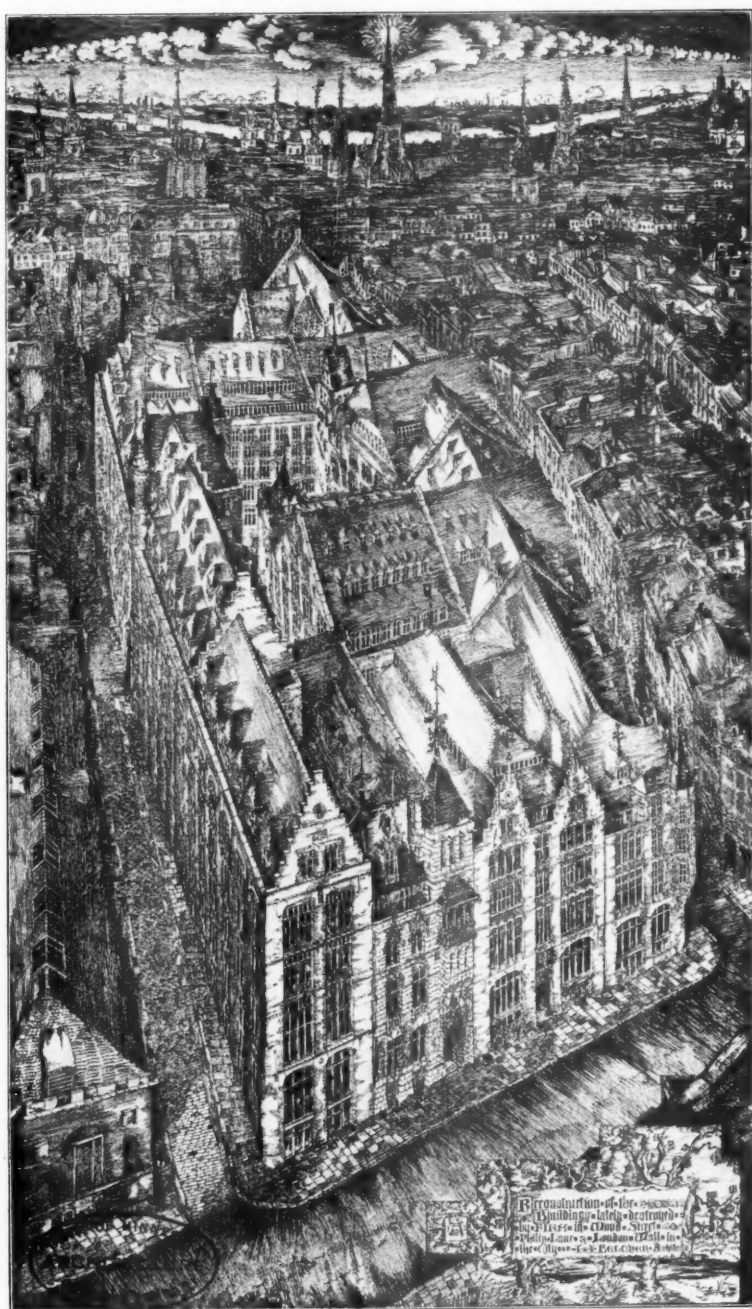


FIG. 1. RYLANDS'S PREMISES, WOOD STREET.

addition to the church. The Catholic Apostolic Church, Paddington, is another design of that period. It will remind you of Sedding's Sloane Square church, which was erected about the same time. With the exception of one or two small restorations and additions, he did no more church work until quite recently.

About the year 1875 Mr. John Belcher, sen., retired from business, and his son entered into partnership with Mr. James W. James. This arrangement continued until 1882, Mr. James continuing the business management of the firm until his retirement in the latter year.

Soon afterwards Mr. Beresford Pite returned to him after a year's absence on the staff of *The Builder*. In 1885 he became a partner, and much of the work subsequently produced exhibits his influence very strongly. Their conversion from Gothic appears to have taken place about the same time, and the Renaissance soon captivated them. Signs of this change are not wanting in Mr. Belcher's domestic work, and several visits to the Continent seem to have confirmed him in his devotion to the style.

His first important public building, the new Hall for the Institute of Chartered Accountants, was won in competition. It was the lighter and more fanciful phase of Renaissance architecture which appealed most to him at this time, and his mind was strongly stimulated by visits to Southern Germany and Vienna. The eccentricities of the late Italian work at Genoa also had its effect upon him and is reflected in the Accountants' Hall.

At the date of its completion in 1891 this building possessed many novel and almost startling features, though they are no longer thought so, and since then many of them have become so familiar by much repetition as to seem almost hackneyed. It attracted a great deal of notice, favourable and otherwise, according to the individual leanings of the critics of those days; indeed, the controversy still goes on. I have just heard from a friend of mine in Lord Kitchener's army, billeted on another member of our profession whose pet topic is the pernicious influence of Belcher and all his works on English architecture. This individual is in a distinct minority to-day, however. Its sound proportion and beautiful detail make this building even now one of the most interesting and stimulating examples of the modern Renaissance style in England. Moreover, it is unique in being embellished by the work of two of the most accomplished English sculptors, Mr. Hamo Thornycroft, R.A., and the late Mr. Harry Bates. They have never, in my opinion, surpassed their work on this building, which, I think, is the high-water mark of architectural sculpture in this country, and the exquisite fitness of the setting gives additional value to its effect.

It is pleasing to have to record that the interior decoration of the Council Chamber of this building is now in progress. It is based upon the lines originally suggested—a repetition of the architecture of the room in the great panels on either side, with subjects of a symbolical character carried round the semi-domes at either end. The work is being carried out by Mr. George Murray, and I am glad to be able to state that it had Mr. Belcher's entire sympathy and approval. It was no small comfort to him in his last illness to know that this building, which I have good reason to believe was his favourite one, was at last to be embellished as he intended it to be done.

While the Chartered Accountants' building was in progress the competition design for the South Kensington Museum was being prepared. The reputation of an architect usually rests upon work which he has actually carried out and left behind complete, but this design, like the first design for St. Paul's in the case of Wren, must certainly be reckoned with in any estimate of Mr. Belcher's work and influence. It gave a fine opportunity for the display of that imaginative and fanciful phase of the Renaissance which he adopted at this period, and, I think, has not been surpassed in these qualities by any English architect of our time. The drawing of the Main Entrance Hall and Gallery [fig. 4] has not been seen by many of the present generation of draughtsmen, and is one of the finest architectural drawings I know.

Among a number of designs made about this time, chiefly in competition, may be mentioned a

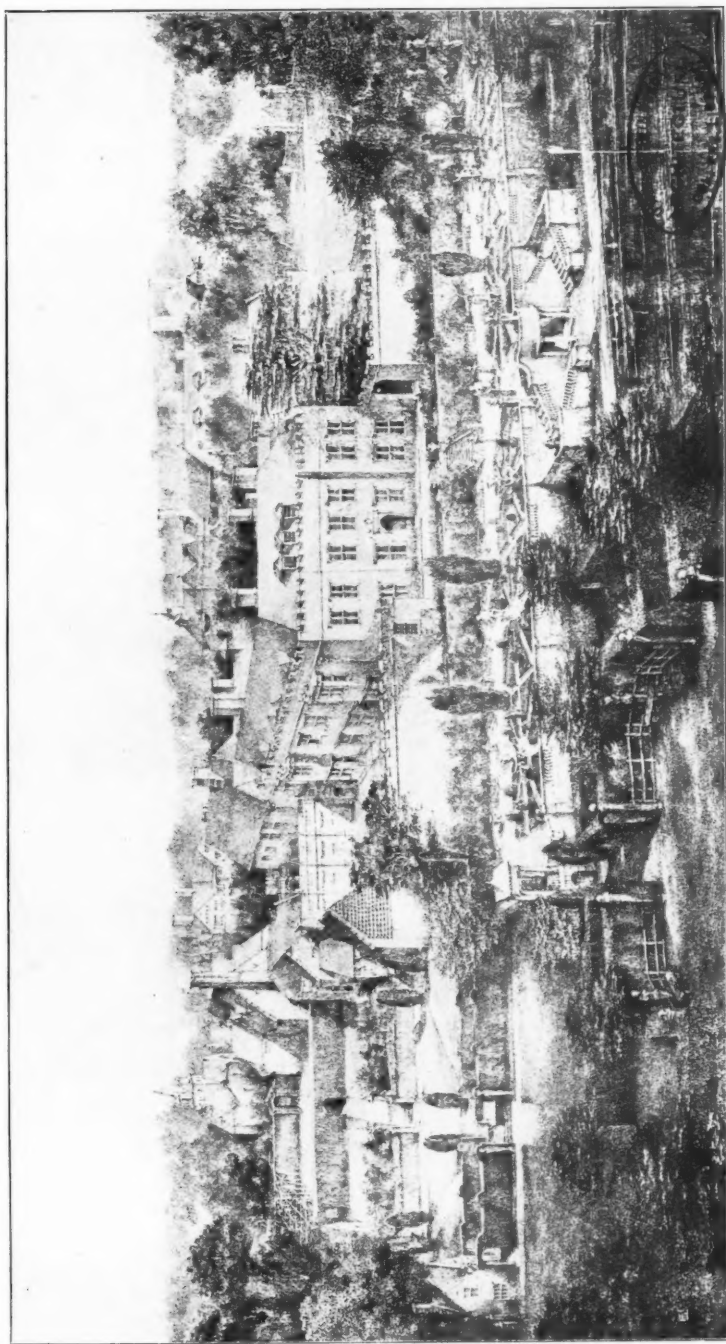


FIG. 2. STOWELL PARK: RESTORATION AND ADDITIONS BY MR. BELCHER.
From a Pen-and-Ink Drawing by Professor Beresford Pitt.

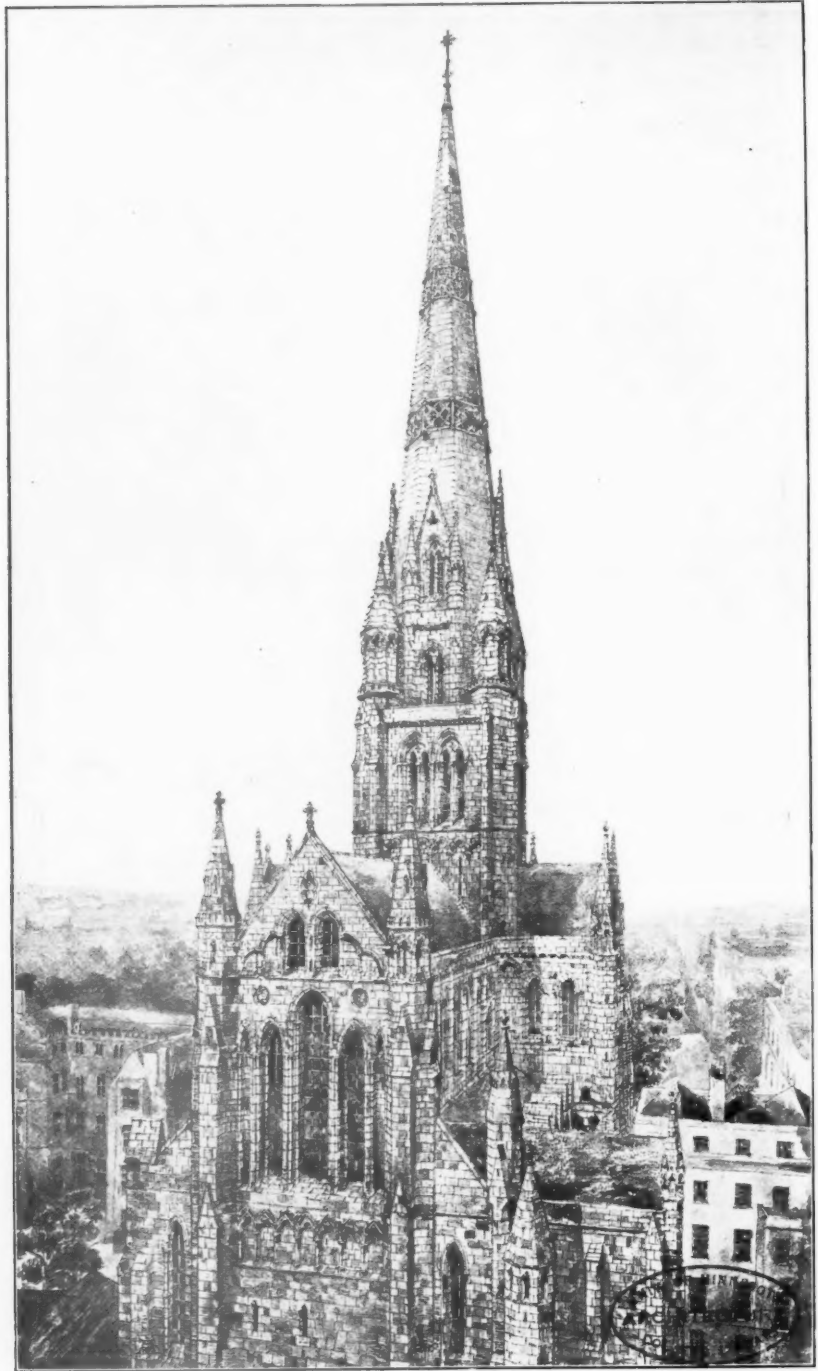


FIG. 3. MR. BELCHER'S DESIGN FOR COMPLETION WITH SPIRE OF BRANDON'S GORDON SQUARE CHURCH.

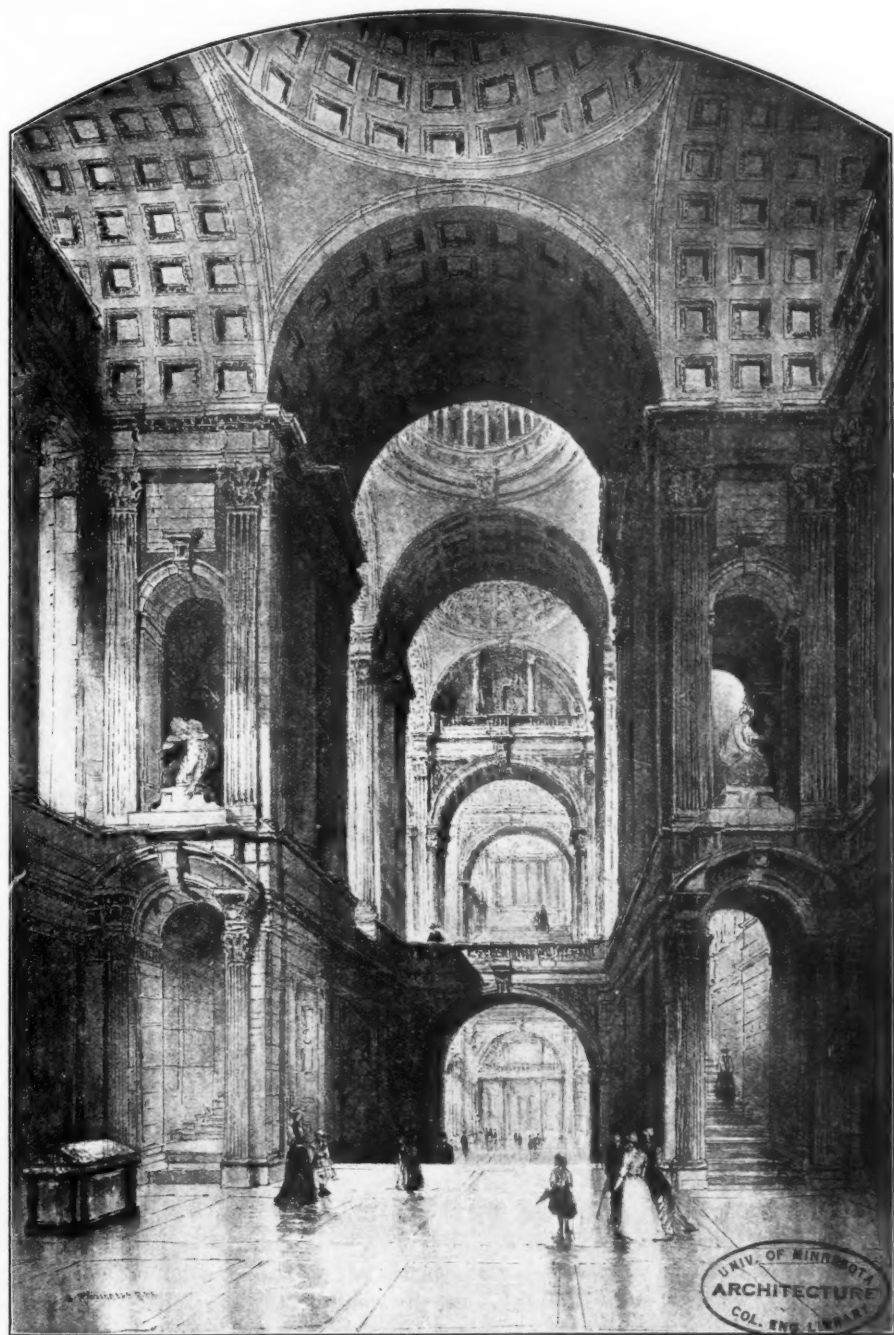


FIG. 4. MR. BELCHER'S COMPETITION DESIGN FOR SOUTH KENSINGTON MUSEUM: MAIN ENTRANCE HALL AND GALLERY.

very fine one for the chief offices of the Royal Insurance Company in Liverpool. This shews a tendency to the more orthodox lines of the Italian Renaissance, which becomes increasingly apparent in his work from year to year.

About the year 1890 the office was removed from Adelaide Place to 20, Hanover Square, and with the removal came a change in the character of his practice. For a number of years following he had little work to do in the City, but in another direction he was fully occupied. About the year 1895



FIG. 5. THE ASHTON MEMORIAL.

Mr. Belcher collaborated with Mr. Macartney and the late Mr. Bradley Batsford in the production of *The Later Renaissance Architecture in England*. This was a work which absorbed a great deal of his time and interest, and he frequently referred to this time as one of the happiest of his life. Many were the meetings and conferences, and innumerable the drawings, photographs, and sketches passed in review before the final selection was made. I have been told by one of the best-known and most successful architects in America that it is the most useful architectural work ever published, and it must certainly have saved many an architect an infinity of trouble in the design of English woodwork.

The making of this book had the effect of turning Mr. Belcher's thoughts from Vienna and Genoa to England, and had a great influence upon his subsequent work.

While he was engaged upon this work, in the year 1895, it was, I think, Mr. Beresford Pite who suggested to him that I might have some drawings which were required for illustration. Several were found suitable, and eventually I made a number of others, which have found a place in the book.

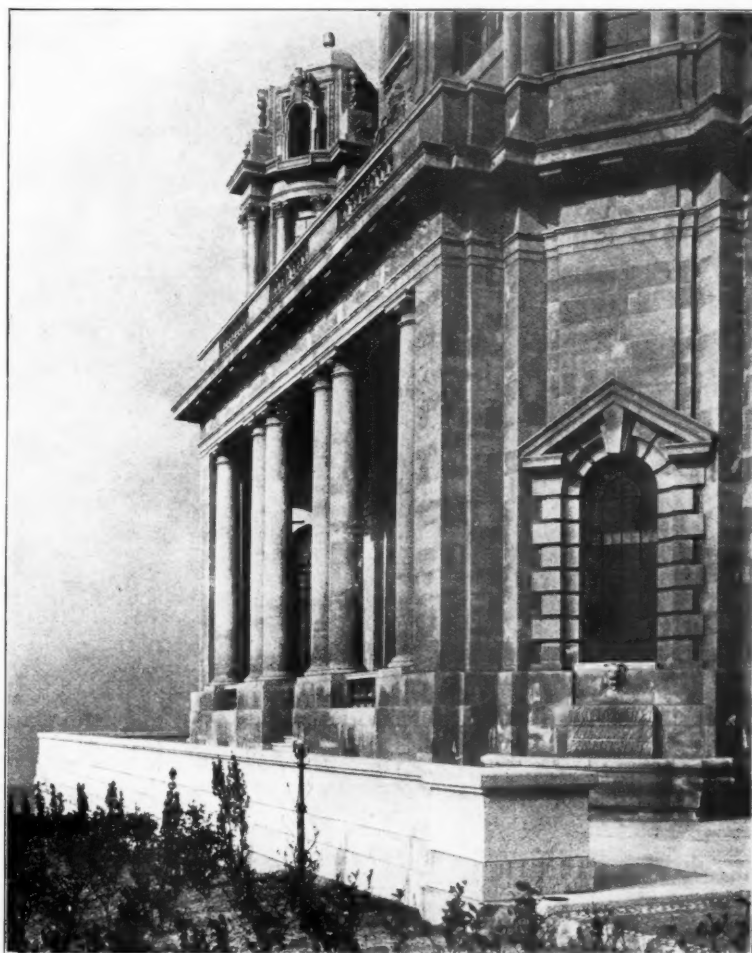


FIG. 6. ASHTON MEMORIAL: SIDE VIEW OF COLONNADE.

At the same time I found a good deal of very varied work to do in his office, and in this way a lasting friendship commenced which endured until the day of his death. In 1905 we entered into partnership and since then worked constantly together.

The leisure which he had enjoyed for several years was interrupted by work on the drawings for the new Town Hall at Colchester. This was won in competition with several other well-known London architects, and was the first of several designs based on decidedly English lines. From this time onward the practice, which was a steadily increasing one, left him little time for further efforts in a

literary direction. He found time in 1906-7 to write *Essentials in Architecture*, a very opportune work and one which met with an extensive welcome from the Press and public. It was with him a labour of love and represents very faithfully the principles which he continually strove to put into practice.

Representative works of these years are the Colchester Town Hall, The Tower, Pangbourne, Electric House, Cambridge Town Hall, Cornbury Park [fig. 7], and the Ashton Memorial [figs. 5 & 6]. The outstanding feature of the latter building is, I think, its construction. The site is a most exposed one and the wind pressure upon the isolated dome at times enormous. In the ground plan the four diagonal

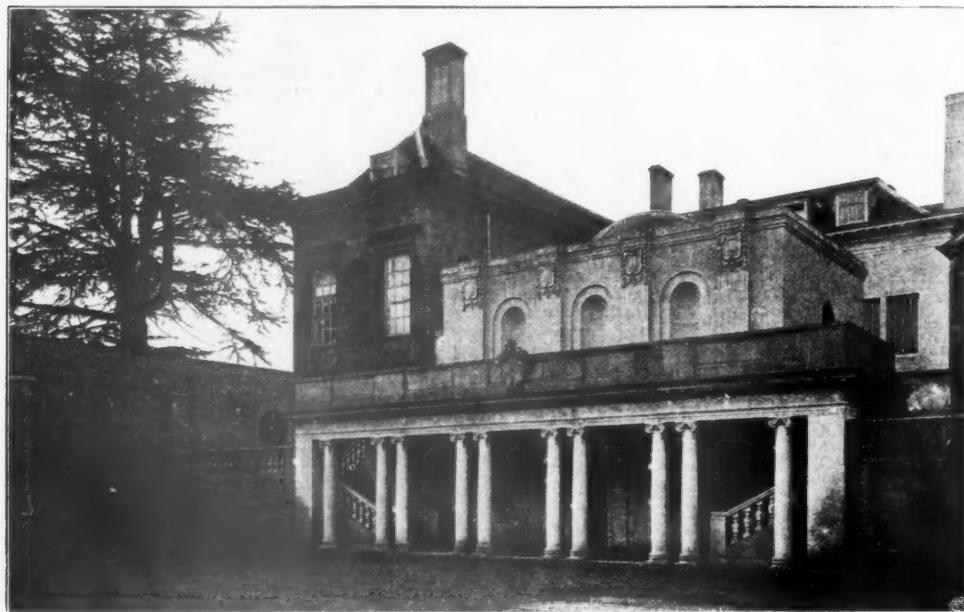


FIG. 7. CORNBURY PARK, OXFORDSHIRE: NEW ENTRANCE.

chambers, besides enclosing and sheltering the piazzas, form powerful buttresses for the corners of the square. They are weighted by cupolas above, and the walls of the first stage are carried up of great width with a hollow space between. The second stage, as you will observe, is constructed on the principle of the Roman Pantheon, having the alternate rectangular and semicircular recesses adopted with so much success there, giving great lateral strength to the wall supporting the dome, combined with lightness of construction, and doing away entirely with the use of steel until the dome itself is reached, &c.

Other work of this period includes the Royal London Insurance Company's Offices, the reconstruction of No. 45 Belgrave Square, a library in 49 Prince's Gate, Mappin & Webb's new premises, Oxford Street, additions to Winchester House, Old Broad Street, and the Royal Insurance Building in Piccadilly.

(To be continued.)

THE CIVIC DEVELOPMENT SURVEY AS A WAR MEASURE.

By H. V. LANCHESTER, Vice-President R.I.B.A.

Read at a Meeting convened by the Architects' War Committee, and held at the R.I.B.A. Galleries, Thursday, 17th Dec. 1914.

AS you are probably aware, an important part of the work of the Architects' War Committee is the provision of work for those architects who are deprived of a livelihood owing to the War. It is all very well to raise the cry of "Business as usual," but it soon becomes obvious that when a large proportion of the national earnings have to be devoted to carrying on warfare on its present scale, other industries involving the employment of capital must suffer, and that after making due allowance for those professional men who are qualified and able to join His Majesty's Forces there must still remain a large number who are placed in a very difficult position, not only among architects, but in other professions connected with building and all forms of activity depending on capital.

Now, in looking around to see how such professional men could be most usefully employed, the Professional Employment section of the War Committee came to the conclusion that the work of Civic Development Survey should take a prominent place in their programme.

I do not propose to go into the efforts being made to secure this support, but I may say that they have received a measure of encouragement sufficient to justify perseverance in these activities. A general scheme for administration has been sketched out, but, as there are other more important considerations before us, I will not now take up your time with details of this kind, but will pass on to define what is comprehended in the work of the Civic Development Survey.

Perhaps you will ask why, before doing this, I do not proceed to make out the case for undertaking this work either at all or more especially at the present time. I will give you my reason for leaving this admittedly necessary argument till the end. It is that there has been so much vague talking and loose thinking on this subject that until a clear definition of the aims and methods of a Civic Development Survey is formulated it is impossible to appreciate either its general claims or its suitability as a war measure.

Now, as might be expected, of all our British cities, London has carried this class of work the furthest, and the fact that we have now on the walls a number of examples of civic survey work in London will materially lighten my task. Where authorities differ I shall make no attempt to decide between them, but will content myself with the broad general lines and leave it an open question as to relative urgency of the various sections.

It will help my purpose to quote Mr. Raymond

Unwin, who has, we must all agree, so fully justified his selection for the post of Chief Inspector of Town Planning by the Local Government Board.

SCHEDULE OF PRELIMINARY INFORMATION THE COLLECTION AND CONSIDERATION OF WHICH AT A PUBLIC TOWN PLANNING ENQUIRY SHOULD BE PROVIDED FOR BY THE TOWN PLANNING BILL.

(a) A collection of old maps to show as completely as possible past lines of the town's development. (Those prepared in 1832 would be useful in this connection.)

(b) Ordnance Survey maps, coloured to show the present condition of the town with regard to such matters as:—

1. Difference in degree of density of population.
2. Any insanitary areas, or areas of special poverty.
3. Distribution of manufacturing business areas.
4. Parks and other public open spaces.
5. Vacant spaces available for the extension of (4).
6. Public buildings and all places of public interest or special beauty within the area to be dealt with.
7. Traffic facilities, railways, tramways, tubes, waterways, &c.
8. The lines of main drainage and water supply.
9. All the finer existing trees on the area to be dealt with, together with any other feature of natural beauty or interest.

(c) Geological maps, with diagrams showing prevailing winds, rainfall, &c.

(d) Contour survey maps of the areas to be dealt with, showing the levels of the whole of the ground at frequent intervals.

(e) A relief model of certain portions of the ground would be most desirable.

(f) Maps of other towns, ancient and modern, English and foreign, similarly situated, to be used for purposes of comparison and suggestion.

In addition to the information required to make the above maps there should be collected all possible information concerning:—

(a) General traffic conditions, and statistics, the degree of flow into and out from the centre with its general direction.

(b) Particulars of existing, proposed, and desirable railway, waterway, highway, and tramway facilities.

(c) Particulars of local industries and the requirements for their encouragement and extension.

(d) Particulars of existing tendencies of the town's growth, with indications afforded by them as to the natural lines of the town's development.

(e) Historical and legendary associations with places or buildings, particulars of places of special beauty, together with such points as a prospect of sea, river-front, or public building which it is important to preserve or provide for.

In connection with (e) a collection of photos with plans to show their points of view would be of great value.

(f) Particulars as to parks, playgrounds, and other public spaces, with statistics as to their relative use by the public, and suggestions as to the special needs of the present town, and as to desirable places to be reserved to meet the needs of future town extensions.

(g) Estimates of the probable future requirement of schools and all other public buildings for which it would be desirable that sites should be chosen and reserved.

(h) Particulars of any local customs, requirements, or prejudices affecting the desirable size and shape of building plots for various purposes, hence determining the distribution and distance apart of new streets. Any suggestions as to the character and treatment of new streets.

(i) And, finally, particulars of all local conditions as to building materials and traditional methods of building prevalent in the district, types of trees and shrubs which are known to flourish, and any of the more subtle characteristics which go

to make up the individuality—historical, economical, and artistic—of the town or city under consideration, with a view to preserving as far as possible such individuality in the enlarged town.

OUTLINE SCHEME FOR CIVIC DEVELOPMENT SURVEYS IN RELATION TO PROFESSIONAL UNEMPLOYMENT.

In view of the general recognition of the fact that thorough civic surveys are an essential preliminary to the preparation of sound schemes for the future development of our cities, it may be pointed out that the present moment offers exceptional opportunities for enlisting the services of those peculiarly qualified for such an undertaking. It is already evident that during the continuance of the War there will be a considerable diminution of employment among the professional classes, many of whom would possess experience and training suited to the demands of this work. In such conditions the provision of a means of livelihood is by far the best method of avoiding distress, and, therefore, employment or work having a general and permanent value meets, to an exceptional degree, the necessities of the case. A subscription for the purpose has been started by the Architects' War Committee, but it is allocated to this profession only, and, as it does not appear that a scheme so wide in its scope should be dealt with on these exclusive lines, it is hoped that the other professions will be induced to co-operate in the collection and distribution of a fund, which, having regard to the general utility of the work to be done, should also receive support from the nation as a whole.

Local supervision might be exercised by an honorary committee of leading citizens who would employ, on certain definite lines, a professional staff, recommended to them by the various committees interested, for the purpose of procuring and tabulating such information as is comprehended in the civic survey.

It is suggested that the work should be grouped under the following headings:—

1. **ARCHAEOLOGICAL.**—Comprising records of all sites and buildings of architectural or historic interest, with positions and particulars indicated on maps.—All existing information collated and deficiencies supplied.—Suggestions for the use and preservation of buildings obsolete for their original purposes.

2. **RECREATION.**—The study of existing information.—Position, character, and areas of parks and recreation grounds, the extent to which they are used, and the location, density, and general status of the inhabitants using them.—Public buildings, such as libraries, baths, etc., on the same basis.—Private playing fields, golf links, etc., dealt with on similar lines.—National features of exceptional interest.—Suggestions as to correlation of all these, neighbourhood, centres, &c.

3. **EDUCATIONAL.**—Study of existing statistics as to educational facilities and the local demands on them, diagrammatic indications of grade, attendances, and the operations of private and religious bodies.

4. **HYGIENE.**—Existing statistics are here fairly complete. Study of these in relation to physiography and population density, with results shown graphically.

5. **COMMERCE.**—The indication of existing (and probable future) centres of employment, their character, the

numbers of employees, the localities they occupy, average wages, &c.

6. **TRAFFIC.**—Railway, water, tramway and road facilities with the existing traffic. Capacity of each and probable future developments considered in relation to traffic.

7. **VALUATION.**—Graphic rendering of relative values of all land and buildings.

8. **GENERAL.**—Collection and classification of maps, illustrations and statistics of other towns, British or foreign, displaying similarities in their growth and circumstances.

The information gathered under these headings would be placed in graphic form on Ordnance maps, thus giving facilities for comparison between the various factors, and forming a permanent record of present conditions and future possibilities. The whole would be arranged in a form suitable for publication if required, but the confidential character of some of the information would necessitate that exhibition or publication should be at the discretion of the municipal authorities. Subject to this proviso the results would naturally be gathered together to form a civic museum, open to the public, which is bound to exercise an important influence on the future of the city.

Now I have endeavoured to subdivide all this work into groups and have prepared what may be described as specimen sheets, showing how the work may be carried out by many who have had so far no previous training except a sound general education coupled with the discipline of some employment, so that workers of all kinds may be brought into the scheme by a good system of organisation and by clarity of definition in these subdivisions.

CIVIC SURVEY—DRAFT SPECIMEN SHEETS.

Sheet 1.

I.—ARCHAEOLOGY (A, GENERAL).

Prepare a plan of the city (using 6-inch Ordnance sheets) showing by hatchings its extent at the following periods:—

Roman ...	...	...	...	...	...
500 to 1700 ...	...	...	...	...	...
1700 to 1831 ...	...	...	...	...	...
1831 to 1851 ...	...	...	...	...	...
1851 to 1871 ...	...	...	...	...	...
1871 to 1891 ...	...	...	...	...	...
1891 to 1901 ...	...	...	...	...	...
1901 and after ...	...	...	...	...	...

Supplementary notes as to the reasons for periods of stagnation and development and as to any salient features of the city as a whole at various dates, such as lines of wall, water-courses, &c.

Old maps and views or copies should be collected and arranged in order of date. Reference should be made to those in existing collections, stating where they may be found.

Sheet 2.

I.—ARCHAEOLOGY (B, SPECIAL).

Plot (if necessary) and tint on Ordnance sheets:—

British camps...	...	...	...	...	...	Buff
Roman camps ...	...	...	...	...	...	Pink
Battlefields ...	...	...	...	...	...	Salmon

Other historic sites	—
Roman roads	Pale grey
Roman buildings	Red
Medieval buildings	Blue
1500 to 1700	Green
Buildings of exceptional architectural interest since 1700... ..	Black
Buildings of historic interest (such as residences of great men) since 1700	Brown

Each site or building to have a reference number referring to a folio in which all the information, drawings, views, &c., shall be collected.

This information should include the names of present owner and occupier, full description of past and present use, particulars of alterations and restorations, list of books and illustrations dealing with it, stating where same may be found.

Suggest uses for interesting buildings that are obsolete for their original purpose.

Sheet 3.

II.—RECREATION.

Obtain all information available re municipal undertakings, such as parks, recreation grounds, public buildings for entertainment, libraries, baths, &c. Also private provision for playing fields, golf links, racecourses, houses of entertainment, &c. Find, if possible, the annual number of visits to these.

Colour on six-inch Ordnance sheets:—

Public parks, &c.	Dark green
Private recreation areas	Light green
Public buildings for entertainment	Red
Libraries	Brown
Baths	Blue
Places of entertainment (private)	Pink

Against each place (or on margin of map) a group of squares proportioned to number using (say $\frac{1}{4}$ -inch square equals 10,000 per annum), and a reference number referring to detailed description and statistics in folio.

This description should include date of opening, leading features, &c., and the general character of the ground or premises.

Waste land.

Sheet 4.

III.—EDUCATION.

Bases of Information.

Reports of Education Department.

Reports of Education Committee of County Council.

Census returns.

Reports of Juvenile Labour Exchanges.

Indicate on Ordnance sheets position of

Provided schools	Red
Non-provided schools	Brown
Secondary schools... ..	Orange
Private schools	Blue
Boarding schools	Green
Universities and technical institutes for specialised teaching	Purple

Against each place (or on margin of map) a group of similarly coloured squares proportioned to number on register of each institution (say $\frac{1}{4}$ inch square to each twenty), with percentages of accommodation provided and attendances, and a reference number referring to detailed description, area from which students are drawn, their playgrounds, and other statistics, in special folio.

Notes as to scholarships, progress, physique, and circumstances of students, teaching methods, &c., and further studies co-relating to other sections. Also as to subsequent careers of students as related to the education they have received.

Sheet 5.

IV.—HYGIENE.

Bases of information:—

A geological map.

A contour map (6-inch Ordnance).

Census returns.

Reports of Medical Officers of Health.

Meteorological reports.

The contours at every twenty-five feet to be coloured on the 6-inch map.

A set of 6-inch Ordnance maps to be hatched as directed to show:

Density of population.

Death rate.

Zymotic death rate.

Infant death rate.

Birth rate.

Proportion of misdemeanour and crime.

Other statistics to be illustrated graphically:

Physique.

Crime (classified).

General hospitals.

Provision for epidemics.

and general conclusions to be arrived at as to insanitary areas and the working of municipal services in regard to health.

Exceptional overcrowding and other points demanding attention should be reported on.

Sheet 6.

V.—COMMERCE, INDUSTRY.

Collect and tabulate the following information (Data from Chamber of Commerce, Labour Exchanges, &c.).

Output and its destination.

Industries of city and district.

Where and how carried on.

Factories, mills, &c.

Past or decaying industries and reasons.

Expanding industries and reasons.

Localisation of industries.

Method of work and payment.

Home industries and their condition.

Seasonal and intermittent employment.

A general historic review of the city's industrial development.

Supply, distribution, and other services.

Food, how obtained, and modes of distribution.

Other requisites, and modes of distribution.

Municipal services, and modes of distribution.

Relationship between wages and prices.

Plot on 6-inch Ordnance map in various colours the premises where numbers are employed.

Municipal undertakings (classified into trades).

Co-operative undertakings (classified into trades).

Joint stock and private undertakings (classified into trades).

Against each place (or on margin of map) a group of similarly coloured squares proportioned to number of employees (say on $\frac{1}{4}$ -inch square to each twenty) with average

weekly wage, and a reference number to folios giving further statistics, localities where employees reside, &c.

Hatch as directed on a similar map areas where the weekly wages of the inhabitants fall between certain amounts.

Diagrams of unemployment percentages in trades by the week and year.

Sheet 7.

VI.—TRAFFIC.

Obtain the Report of London Traffic Branch of Board of Trade, 1912, 6s. Study this, obtain what statistics are available, supplement these by personal investigations, and prepare reports of traffic conditions in your city on similar lines. The work may be divided into:—

1. Tramways.
2. Street vehicles.
3. Pedestrians.
4. Railways.
5. Waterways (if any).

1, 2, and 3 should include notes on road and pavement widths and their adequacy or otherwise for the existing and probable future traffic. Special notes should be made of points at which traffic difficulties arise and the reasons investigated as far as possible.

I venture to add a supplementary sheet prepared by Mr. V. Bell showing a somewhat different treatment of the subject selected.

Supplementary Sheet.

PHILANTHROPIC ACTIVITIES.

1. Survey of official action as regards poverty, cases of the blind, deaf and dumb, epileptics, inebriates, and other physical and mental defectives, orphans, waifs, &c.
2. Survey of voluntary action in the same—*e.g.*, Charity Organisation Society, Surgical Aid Society, Ragged School Union, Incorporated Society for the Blind.
3. Note on co-operation between official and voluntary action and suggestion for further co-operation.
4. Survey philanthropic action of religious bodies and suggest co-operation.
5. To tabulate working of Act for Feeding Necessitous Children in locality.
6. Survey working of such institutions as boot, coal, blanket clubs.
7. Survey local charitable bequests: original bequests and how now applied: by whom managed (Charity Commissioners, &c.): (almshouses, &c.).
8. Especially note the effect (pauperising or otherwise) of philanthropic work in locality.
9. Survey philanthropic work (official and voluntary) in connection with dumb animals (R.S.P.C.A., &c., and cattle troughs, &c.).
10. Action (official and voluntary) *re* unemployment.
11. Action (official and voluntary) *re* fallen women.
12. Official and voluntary activities *re* medical treatment (hospitals, &c.).
13. To prove value of such (as Children's Country Holiday Fund).
14. Survey work dealing with recreation—*e.g.*, Children's Happy Evening Association and play-centres.
15. Work such as college settlements, Toynbee Hall, Oxford House, &c.
16. Dealing with ex-criminals (official and voluntary) might come under this heading.
17. Co-relation with sheets on Recreation, Hygiene, Education, &c.

As the result of these investigations we obtain a valuable mass of information concerning the city,

most of which is presented in graphic form so that it is easily assimilated and used in making comparative studies. To facilitate these comparisons all maps, etc., should be suitably arranged and hung on the walls of a permanent Municipal Exhibition (with the exception of those containing information that the Authorities might regard as of a confidential nature).

This Exhibition would serve the double purpose of reducing the labours of those undertaking the task of preparing a Town Planning Scheme and also of educating the citizen in the conditions and factors governing his life and that of his fellows.

Now that the development of our cities has been made by the Town Planning Act a matter of public initiative, it is urgent that the information comprised in the Civic Development Survey should be placed in a convenient form before those who are concerned in carrying out the Act.

But of far more importance than this (for, after all, the expert can get a great deal of the information he wants by digging for it) is the influence that would be exercised on the general public, substituting a fine ideal of communal life for a narrow individualism.

REVIEWS.

ST. GILES-IN-THE-FIELDS.

London County Council Survey of London. Vol. V. The Parish of St. Giles-in-the-Fields. Part II. 4s. Lond. 1914. Published by the London County Council, Spring Gardens.

The present volume is the fifth of the authoritative series issued under the general editorship of Sir Laurence Gomme and Dr. Philip Norman; it completes the survey of the Parish of St. Giles-in-the-Fields, and treats of the important building operations that took place in the north of the Parish at the close of the eighteenth century.

It is not an easy matter to review a work of such magnitude and historical value. In the first place, one is overawed by the mass of information; and, secondly, one views such industry with jealous eyes; for every separate volume of the series already published contains matter sufficient to the cycle of the Renaissance in England. In the Preface Sir Laurence Gomme states: "As in the case of the other volumes issued, the important part of the book, from the survey point of view, is to be found in the photographs and drawings, to which the letterpress is strictly subservient, but which form only a portion of the actual collection in the hands of the Council." This is one of the points on which I disagree with the distinguished editor; for although the drawings are explicit and well selected, the photographs in many instances are unworthy of reproduction, especially in a work that purports to stand for all time. This remark is not meant to disparage the whole series of illustrations, but only refers to certain subjects, which I shall specify further on.

Sir Laurence Gomme very modestly refers to the

letterpress, which in its accuracy is fascinating to a degree; and he states: "The materials for the history have been gathered from diverse sources, and the lists of occupiers of the various houses dealt with have been obtained principally from the parish and sewer rate books, supplemented by the Hearth Tax Rolls and information given in deeds."

The volume opens with a description of the Boundary of the Parish of St. Giles, leads one gently through High Holborn, Little Turnstile and Kingsway to the seventeenth-century thoroughfare, Great Queen Street. It explains the foundation of the Freemasons' Tavern and the Great Queen Street Chapel, now demolished; it speaks of Sardinia, Betterton and Endell Streets; dwells for a space on Marshland (Seven Dials), lingers historically on the church from whence the Parish takes its name, skims New Compton Street, Denmark Street and Denmark Place; investigates the site of "The Rookery"; crosses New Oxford Street and explores Great Russell Street; and, finally, enters Bedford Square, whose secret is revealed in thirty-eight pages of absorbing information.

One cannot bestow too much praise on a policy that is directed so thoroughly to include specimens of architecture even of such recent date as F. P. Cockerell's additions to the Freemasons' Tavern. But it is a matter of surprise to the reviewer to find that New Oxford Street is scarcely mentioned. Yet this shopping thoroughfare in architectural treatment is second only to Regent Street; its achievement was one of the last efforts of the Committee of Taste, and Sir James Pennethorne, the nephew of John Nash, was the architect. Neither is there mention of the famous Brewery at the corner of Bainbridge Street with its brickwork arcuations of interminable length; this structure was a favourite subject with the early nineteenth-century print-sellers. Perhaps in another volume these omissions will be included.

It is also a matter for regret that no mention is made of Flaxman's tomb in the churchyard of St. Giles; tombs are always of interest to the antiquary, and the best of them should be recorded. Referring to the text, it is welcome to see small illustrations inserted, in proximity to the descriptions, such as plans, sketches of date tablets, stair brackets, coats-of-arms, fireplaces, and other items, all of which give colour to the subject.

The chief interest of the volume, however, to the designer who reverences the work of the past inheres in the 107 plates of drawings and photographs. From the respective maps of Agas, 1560-1570; Hollar, 1658; Fairthorne, 1658; Strype, 1720; and Hewett's Survey, made in 1815, can be traced the abnormal development of this residential quarter from the neighbourhood of Lincoln's Inn Fields, in the middle of the seventeenth century, until Thomas Leverton and George Dance finished the planning of Bedford Square and Alfred Place. Hewett's map of 1815 shows Russell Square as completed by the elder Burton; also Gower Street and the projected streets forming the rampart of northern Bloomsbury to the New Road. Plate 7 shows some interesting joinery details of a room

belonging to the first quarter of the eighteenth century. Plate 8 is a photograph of a unique early nineteenth-century shop front. Plate 9 is a very black photograph of a charming late eighteenth-century shop front, from which it is impossible to read the detail. Plate 10 is so bad in reproduction that its inclusion in the book seems incredible. Plate 11 shows two eighteenth-century window treatments, which readily lent themselves for the purpose of small shops. Plates 12 to 22 are alternately drawings and photographs of architectural buildings and details from Great Queen Street and buildings in the vicinity. Exception, however, must be taken to Plate 19, which is a dull, black photograph. The internal and external aspect of the Freemasons' Tavern and Markmasons' Hall is adequately dealt with on Plates 24-31. The Temple, by Thomas Sandby, R.A., 1775, demands every attention from the designer.

The Italianate, Great Queen Street Chapel, now demolished, is illustrated by two fair photographs, but the name of the architect is withheld. The group of late seventeenth-century houses in Little Wild Street, with the original wooden palisades (Plate 34), is a good example of a terrace of two-storied houses of the period, and it shows how the dormer windows were enlarged to provide increased attic accommodation. Plates 35 and 36 show doorcases from Betterton Street, both of the "Adam mode." Plates 37 and 39 are respectively illustrations of "Queen Anne's Bath," No. 25 Endell Street, and the Bowl Brewery. A plan of the proposed setting out of Seven Dials, dated 1691, and a photograph of the Seven Dials Column, now at Weybridge, follow. The series of shop fronts Nos. 14-16 New Compton Street must have looked very smart in their primary order, but unfortunately the glazed portion of the bow has been swept away in each example; the photograph is very indistinct. Plates 43-46 give an excellent series of measured drawings of the Church of St. Giles-in-the-Fields, by Mr. H. Cecil Newman; the photographs of the exterior are too faint to be of value. Plates 49 and 50 are interesting as views of the interior of the church in 1753 and at the present time; they are followed by other illustrations of the vestry and details. The type of architecture that formerly made Denmark Street is recorded, and one is charmed to encounter a beautiful photograph of the blacksmith's forge in Denmark Passage.

The chief architectural interest of the present volume, however, is to be found in the series of magnificent illustrations revealing Bedford Square, Plates 62-105. Bedford Square, with the possible exception of Stratford Place, is the only example in London of late eighteenth-century domestic architecture forming a four-sided composition and, with the exception of a few minor details, in its original condition. The fame of the architect, Thomas Leverton, has been overshadowed by that of the Adam Brothers, yet there is a distinction between the works of each. Robert Adam brought the Italian draughtsman, Joseph Bonomi, to England, but it was Thomas Leverton

who first employed him, and to the same architect Flaxman was indebted for employment at the outset of his arduous career. It has been stated on excellent authority that much of the figure modelling in the internal decorations of the Bedford Square houses is the early work of the refined Flaxman. Externally these terraces of town houses are among the most distinguished of their class in London, mainly on account of the exquisite proportion of void to solid and the elegance of the detail. The decorative treatment of the interiors forms subject-matter for a book by itself, and reference to the present volume will show to what a pitch of refinement interior design of the period was brought.

Two doorcases typical of Gower Street are shown (Plate 106), and it is worth stating here that the old opinion regarding the "long unlovely street with paving stones for cornices" no longer holds good. Among other things, the eighteenth-century builders gathered from experience, as well as from other conditions, the wisdom of keeping the architecture of tributary streets comparatively plain, thereby enhancing the value of central spaces such as Bedford Square. At the beginning of the last century the vista northwards along Gower Street was terminated by the classic vision of the wooded heights of Hampstead and Highgate, and even to-day a remnant of the famous view is to be seen. But the simplicity of Gower Street has been invaded by tall buildings, and much of the charm has gone.

The last of the illustrated plates, No. 106, shows a view of an old farmhouse at the rear of 196 Tottenham Court Road, the chimney-piece on the first floor being sympathetic to Leverton's manner.

The labours of the historian of the future will be comparatively light when the series of the Survey of London is complete and each parish of the Metropolis recorded. No author single-handed could attempt such a task, and the private publisher who could finance such an undertaking does not exist. Only the joint publishing committee of the London County Council and the Committee for the Survey of the Memorials of Greater London could undertake a task of such importance. The accurate drawings, plans and architectural descriptions were prepared by the architect to the Council, Mr. W. E. Riley; and Sir Laurence Gomme, who is responsible for the historical notes, mentions his indebtedness to Mr. W. W. Braines, the officer in charge of the Records, Publications and Museums Branch of the Department.

A. E. RICHARDSON [F.].

CHURCH DEDICATIONS.

Dedications of English Churches: Ecclesiastical Symbolism: Saints and their Emblems. By Francis Bond [Hon. A.], author of "*Gothic Architecture in England*." With 252 illustrations. 8s. 1914. [Humphrey Milford, Oxford University Press.]

In his preface the writer states that it has been a pleasure to write this book, and one can reply that it has been just as much a pleasure to read it. The book

has been written, as might be expected, clearly, carefully, thoroughly; and one could not wish for a better to place in the hands of anyone who desires to get a grasp of the subject-matter without specialising in it. The author is quite frank in telling us that Miss Arnold-Forster's three volumes put the thought in his head, and he acknowledges more than once his indebtedness to that lady's efforts. In dealing with saints we get at once in touch with flesh and blood, and therein lies the charm of this book. It makes the writer enthuse and the reader too. It is very nice and fascinating to read about arches, molds, capitals, and all the rest, but the fascination can never equal that which comes from contemplating human beings, especially those who have fought a good fight and left the world better for their coming. The lives of good and holy men and women have always appealed to the human race, and it seems the most natural thing to dedicate churches in their honour and implore their intercession. Mr. Bond might quite safely have assumed that invocation was practised earlier than the fourth century. There is reason to believe this to be the case. Moreover, if the Jew prayed for his departed ones, we may think that the Christian with his belief in the oneness of life and the unity in Christ would naturally ask the prayers of friends and others who had made a good confession. But, having said this, one is at a loss to account later for the manner in which some saints, whom one would hardly expect to do so, get a large number of dedications, while others, well known, get comparatively few. Mr. Bond tries his best to offer explanations, but they only cover a part of the facts, and it is to be doubted whether we shall ever really be able to understand our forefathers' choice in most of these matters. The first five one can understand—the Blessed Virgin, 2,335 dedications; All Saints, 1,255; St. Peter, 1,140; St. Michael and All Angels, 687; St. Andrew, 637. The author shows how, after the Council of Whitby in 664, the dedications to the Mother of God increase. In the Venerable Bede's list only three dedications appear; but after this one sees the Continental influence, and this is even more apparent if one compares the dedications of the Southern and Northern counties. As to St. Peter's dedications, the writer might have said that it was not due so much to Roman as to Bible influence. St. Peter is always placed first, and is mentioned, after Our Lord, more times than anyone else in the New Testament. In Bede's list of dedications SS. Peter and Paul outnumber all the other saints, and this cannot be ascribed to Roman influence. St. Peter's position also probably accounts for his brother having so many dedications. Mr. Bond thinks it due to St. Andrew's work in the City of Dogs, as told in the fifth century. But the arrangement of names in the Canon of the Mass is much earlier than the fifth century, and St. Andrew's name follows immediately after SS. Peter and Paul in "*Communicantes*"—"sed et beatorum Apostolorum ac Martyrum tuorum,

Petri et Pauli, Andreæ," etc.—while in "*Libera nos*" it is one of only four names mentioned: "*et intercedente beata et gloriosa semper Virgine Dei Genitrice Maria, cum beatis Apostolis tuis Petro et Paulo, atque Andrea, et omnibus Sanctis,*" etc. St. John the Baptist comes sixth with 500 dedications, and his popularity was due not only to his life, but to the fact of his patronage of important bodies such as the Knights Hospitallers. Mr. Bond might also have added that he was patron of the mediæval freemasons.

The book is so interesting that one is tempted to write at great length, but there are a few other points one would like to refer to. The child-king of Mercia has his name given in three different ways, but the most common is not given—namely, St. Wystan. St. Wystan's capital was Repton, and it was at Repton that St. Guthlac was received and thence subsequently started on his voyage to Crowland. The couplet given on p. 120 as sung by children of Bradford in 1825 in honour of St. Blaize is interesting, and one would like to ask whether this may not be another variant of "*Salve Festa Dies.*" On pp. 135 and 161 references are given to St. Sebastian, and it is stated there are only two dedications. In addition to the two given, however, Woodbastwick, Norfolk, is dedicated to SS. Fabian and Sebastian. On p. 184 the author bids us beware believing too little, but on p. 187 he seeks to demolish as mythical some six legends including St. Ursula. It is a pity that he tries to do this, especially after admitting that a church is built at Cologne and contains her body (p. 143).

Having regard to all the circumstances of the case, it is worthy of note that not more than 650 churches appear to have lost all record of their dedication. At the fine old Norman chapel of Steetley the dedication is now kept on All Saints' Day, and no doubt many others of the 650 will follow this course and thus add to ecclesiological difficulties in the future. Having regard to the influence of the mediæval freemasons and the fact that much respect was paid to the *Quatuor Coronati*, is it not strange to find only one church dedicated to them? It is strange, too, that St. Matthias the Apostle has only one dedication, and that a doubtful one; yet many English must have visited his shrine at Trèves and brought back memories of their visit. His name, too, is mentioned in the Canon. Truly it is difficult to understand the method of choice of our forefathers.

The volume not only treats of Dedications, but also of Calendars, the Emblems of Saints, and Ecclesiastical Symbolism. The chapter on Calendars is very useful, but one must take exception to the opening sentence, wherein Mr. Bond, following Bishop Forbes, tells us that "*the ecclesiastical calendar is but a Christianised version of the Fasti of Pagan Rome.*" Surely the author would not have us think that if there had been no Fasti there would have been no Christian Calendar. The martyr's death would not have failed to be remembered, Fasti or no Fasti. Likewise one regrets to see it stated that Our Lord is

represented in early art as Orpheus. In a previous volume of the series we were told that St. George was merely Horus served up afresh. These statements are likely to mislead. Although little is known of St. George, we shall not be far astray perhaps in inferring that he was known to, possibly a friend of, the Emperor Constantine, and one would like to see a better rendering of St. George in another edition of this volume.

We have a useful comparison in Calendars by having those of Bede and Sarum side by side. Had they been arranged in the opposite direction, there would have been room enough for the modern Roman and Anglican Calendars as well, and the comparisons could not have failed to prove interesting. All will heartily agree with the writer's criticism on p. 223 of the Calendars of Sarum, York, and Hereford and the Reformed Calendar.

In the chapter on vestments would it not be well to explain what difference there is between dalmatic and tunicle? It is just one of those things that bewilders. Also would it not be well to supplement the similarity between a modern cassock and a Lancashire boiler by showing the old type of cassock? It would have added greatly to the value of this chapter if the vestments could have had illustrations in the text referring to them. Is Mr. Bond quite right about the pastoral staff? It is not a question of right or left, but of inward or outward. Do not Bishops carry the staff with the crook outward and Abbots with the crook inward? The list of saints, with their emblems and dates of death or martyrdom, cannot fail to be found useful; but why does Mr. Bond omit so many? Even if the Celtic dedications are difficult to follow, it would be better to put in their names and as much information concerning them as possible. This list will be referred to as much as any part of the book, and it is a pity that the list is not complete. As an example, St. Wilgefortis with no dedication finds a place, but St. Winwalloe with three dedications does not. Surely the old rhyme would have warranted St. Winwalloe in finding a place:—

First comes David, then comes Chad,
Then Winwalloe as if he were mad,

referring, of course, to the first three days of the Calendar for March. Is there not a slip on p. 36? Should not "*Sarum Manual*" be *Sarum Missal*? On p. 221 St. Edmund is the only one in the list without his prefix. On p. 122, etc., the Peace of the Church is put down as 312; should this not be 313? The Milanese saints are referred to in several places as "*SS. Gervase and Protasius.*" Why not the English ending for both? These, however, are quite small matters. The fact remains that the book is a good one, and not the least interesting in a very interesting series. The illustrations are, with one exception, remarkably good, and the whole production reflects great credit on the publisher, Mr. Humphrey Milford, of the Oxford University Press. The book deserves, and will undoubtedly have, a large sale.

GEORGE H. WIDDOWS [F.].

WORKING DRAWINGS.

Architectural and Building Construction Plates. Parts I. and II. By W. R. Jaggard. Fo. 1913. [Cambridge University Press.]

This work is published in two portfolios, each containing thirty plates, Part I. covering an elementary, and Part II. a more advanced course of building construction study.

Part I. includes the elementary bonding of brickwork, a little masonry, a dozen or so of carpentry and joinery plates, and a couple of slating and plumbing sheets. The drawings are decisively and clearly set out. They induce indeed the pleasurable, almost guilty, feeling that one is in reality examining another architect's working drawings. One notes, for instance, with a slight sense of shock, that some people do not make their wooden casement windows 24 in. centre to centre of mullions, and so on. The joinery sheets are good—though the wisdom of putting in a work intended for students a sheet of "a cheaper form of sash frame," containing most of the faults which one spends one's life endeavouring to prevent builders from committing, may be doubted.

Part II. is a little more ambitious. The inclusion of some Wren brickwork from the Orangery in Kensington Gardens, and the Guildhall Staircase, Rochester, was a happy thought, and the idea might with advantage have been carried further. Why should not our students learn all their building construction from such classic examples, and so absorb their "architecture" and their building construction at one and the same time? The other more modern examples—the work, as the author naïvely remarks, of "Masters of their Art"—include a pleasant little bay window that might be the work of any one of us, and some mouldings which the student must accept with caution, "Masterly" though they may be. One of the sad lessons which every architect's assistant learns in the first few hours of his sojourn in a new office is that "One Master's Mouldings are another Master's Pain." The student, therefore, will be wise who follows the author's suggestion and considers these plates as illustrating principles of construction rather than as details to be copied literally. But he will nevertheless enjoy examining these well-drawn sheets, which to the last retain the flavour of the working drawing rather than of the building construction plate or even of the measured drawing.

W. H. ANSELL [A.].

TOWN PLANNING.

Transactions of Conference held at the Liverpool Town Planning and Housing Exhibition, March 9-13th, 1914. Edited by S. D. Adshard and Patrick Abercrombie.

It is impossible to read the reports of Conferences such as this, presided over by selected experts, without realising what an immense advantage they must be to all who attend, nor does one always obtain such a report worthy of finding a permanent

place on one's bookshelves. Great credit is due to the Department of Civic Design of Liverpool University for having initiated the Conference and carried it through with such success. It is interesting to learn that the exhibition, as to which the book says little, was suggested by the memorable Exhibition and Conference held in 1910 by the Institute. It is making no invidious comparison, however, to say that the Liverpool Conference, though, of course, limited, was in some respects more practical, as many of the problems of a scheme prepared under the Housing, Town Planning, &c., Act., were described and discussed by those who have had actual experience of its working.

As roads have been aptly described as the bones of a Town Planning Scheme, it was natural that this subject should occupy a prominent place in the conference, and with the City Engineers of Liverpool and Birmingham presiding at the first two sessions, the Conference plunged without preliminaries *in medias res*. Arising out of the description of the recent schemes of these two cities, one or two leading points seem to stand out without dissent. One is the importance of ring roads, which were described alternatively as "park roads" or "elongated parks." Another is that wide roads are essential for safety and quick transit, where high speeds are anticipated. A third point, which has grown wearisome by constant reiteration, is that bye-laws governing construction and width of roads are tyrannical. Both at Liverpool and Birmingham, the districts affected are large enough to secure the planning of ring roads—120 feet wide in the case of the former, and 100 feet in the case of the latter—which a mere glance at the plans convinces one will be most effectual. With smaller districts such a result is only obtainable by some scheme of federation amongst adjoining local authorities, and this suggestion, which was emphasised by Professor Adshard, seems to foreshadow a system of compulsory town planning, at least for certain areas and for certain purposes. The representatives of the Institute at the Arterial Road Conferences now sitting in London will, no doubt, bear in mind this solution, if voluntary agreement by local authorities fail.

Another town planning problem much discussed was that of the limitation of houses to the acre, especially in connection with narrower and less expensive roads. Than Professor Unwin, who presided at one of the sessions, no one can speak with greater knowledge and experience on this subject, but it is important to have placed on record that the City Engineer of Birmingham states as his experience that with land costing £120 an acre "the landowner is quite well able to lay out his land and build 12 houses per acre as profitably under the new conditions as under the old bye-law conditions."

The sessions on Housing were of great practical interest. There seemed to be a consensus of opinion that the tenement house is a necessity, and there is no

doubt that in the north of England and Scotland it will take a long time to change this view. One very reasonable suggestion was made that in urban areas the playing spaces attached to tenement buildings might be larger and should be a charge on the rates and not on housing. Perhaps this has already been done in some cases, but one can well see that where the price of land is high, it would make a considerable difference in the economic rent. The eternal parlour question was thoroughly discussed, neither side apparently accepting defeat, indeed there is no fear but that there still remain many important questions to be fought out and settled at future conferences.

FRANK M. ELGOOD [F.].

CORRESPONDENCE.

Bells and their Tuning.

Tunbridge Wells: 2 Jan. 1915.

To the Editor, JOURNAL R.I.B.A.,—

SIR,—I have read with great interest the review of Sir A. P. Heywood's recent work on Bell Towers and Bell-hanging which appeared in the JOURNAL of 21st November 1914. I think there are several matters which require elucidation from your reviewer as he has undoubtedly made statements which require proof before they can be accepted, and some which I think can be proved to be the exact opposite of what he seeks to establish as fact. With regard to the bell frame, I certainly consider that Sir A. P. Heywood has made his case good, but this can be safely left in the skilful hands of Mr. E. H. Lewis, who will, I hope, deal with this part of the subject.

The particular matter on which I wish to take your reviewer to task is in connection with the tuning of bells and the vague statements he has made concerning the same. He mentions the bells of Lavenham, and states that they are remarkable for certain reasons.

(1) He says that "they are beautiful in themselves." This does not necessarily prove anything as to tone or tune. The contour of a bell may be good, but the tone and tune bad. The ornamentation, if this is included in his description, tends in no way to help tone or tune.

(2) He next says that "they are not tuned on Canon Simpson's principle," and, I presume, claims that they are the better for not being so tuned. Now what is the so-called Canon Simpson's principle? It is very necessary that this should be defined exactly. I have recently analysed the tones of bells of four different founders who profess to tune on this principle, and find that in every instance the bells are as widely apart as the poles as to their component tones, which seems to indicate that the conditions are not understood, or that the bell tuner cannot successfully carry them out.

(3) He then says that the Lavenham bells are hung in a wooden frame. The bell alone is the prime tone factor, and whatever the material of the frame may be, it has nothing to do with the tone of the bell. That the Lavenham bells are hung in a capacious and lofty bell chamber is no doubt to the advantage of the tone of the bells; but again it must be stated that this is an accessory and not a tone-producing element.

The writer has quoted from Mr. T. C. Lewis's booklet on "The Modern Development of Unmusical Tone," and of this there is much to be said. In the first place the quotation as to what Mr. Lewis considers to be the proper component tones of a bell is not complete, seemingly to suit the writer's convenience. Mr. Lewis holds that the hum note in some bells should be a major 7th flattened *about* a quarter of a tone (this is an absurd direction when the exactness of tuning is properly appreciated), and that in others the hum note should be a perfect 8th with the strike note (tap tone). He maintains that these conditions produce the true bell tone as it is in the best ancient examples. I deny this absolutely. There is not the slightest reason why in one instance the hum note should be a harsh discordant interval and in another a perfect consonance. I am prepared to prove that the greatest masters of bell-founding tuned all their bells on the same principle—viz., the hum note and strike note in perfect 8ths. Mr. Lewis contends that when the hum note is a perfect octave from the strike note the bell gives out "unsteady sounds, confused and wavering." The opposite of this is the result of my experience, and there are hundreds of bells in this country at the present time which amply prove the fallacy of his statement. In his brochure Mr. Lewis mentions that the peal of eight he cast for St. Andrew's, Well Street, London, are in perfect tune. An analysis of the tones of these bells shows that he did not practise what he preached, for none of them satisfy his own conditions as to the hum note.

Reference is made to "Canon Simpson's heresies, which are emasculating the truest form of bell music in favour of a weak prettiness. As though it were the function of bells to tinkle tunes or one would wish Wagner's horns omitted from his orchestra."

I think your reviewer may be reasonably asked to explain what he means by "emasculating the truest form of bell music"; also what he considers to be the truest form of bell music, why Canon Simpson should be held responsible for this, and what Wagner's horns have to do with the matter.

I contend that a bell of good tone and tune is a musical instrument, and as such demands musical treatment; but I know there are some who prefer to look upon a bell as "a vessel or hollow body of cast metal, formed to make a noise by the action of a clapper" (Johnson).—Faithfully yours,

WILLIAM WOODING STARNER,

Fellow of the Royal Academy of Music.



9 CONDUIT STREET, LONDON, W., 9th January 1915.

CHRONICLE.

The Shadow over all : American Sympathy.

The Institute has been favoured with a copy of the Address delivered by Mr. Clipston Sturgis, President of the American Institute of Architects, at the Forty-eighth Annual Convention held in Washington on the 2nd December. We have room in the present issue for only a few sentences, and will reserve for a future occasion the eloquent passages in which Mr. Sturgis tells of the high aims and aspirations which govern the policy of the distinguished body for whom he speaks. Mr. Sturgis begins by a reference to the terrible conflict which is desolating the hearts and homes of millions of our fellow-beings. The plight of Belgium and France is known to us ; but Poland is farther afield, and it needs the testimony of an eyewitness to bring home to us the sufferings of that unhappy country. "All Poland," says a message from Petrograd, "is going up in flame. What flame will not consume is being obliterated by gunpowder, by the axe, by pillage and requisitions. Poland is one vast ruin."

The sympathy of our American kinsmen is very precious to us, and Mr. Sturgis gives tactful expression to it. "I cannot speak to you to-day," he says, "except in the light of the trouble which casts its shadow over us all. Nations, peoples, individuals, to whom we owe much, whom we admire, whom we love, instead of working together for the advancement of art, science, and industry, and of, above all, our religious ideals, are testing the strength of modern armaments, and on each side giving freely of all that makes life precious and lovely, giving also life itself, for ideals. Instead of advancing side by side toward a common goal, they are attempting by force to establish ideals—of national growth—of national prosperity—of national honour.

"One only of these is worthy fighting for.

"We stand outside—we look on. There must be something to be learned here. Are we ready and fit to receive the lesson ?

"Our debt to those nations in all that goes to make up our complex civilisation is enormous. In science, in research, in industry, in the arts, in the power to govern through sympathy, we have learned nearly

all that we put into practice as a people from these our fathers. Many nations have contributed to our national life, and to all we are closely bound by ties of blood and by debts of gratitude. Only through sympathetic understanding and mutual forbearance can we hope to work out a great future. . . .

"Very especially may we who practise the complex art of architecture turn with loving sympathy towards those to whom we in especial owe so much, and try to learn the value of gaining our ideals in the right way. Force is the court of last appeal. Only when all else fails is force justified. To avoid the use of force every effort should be made to adjust differences by honestly trying to see both sides, to avoid differences by seeking first the points of agreement, by the exercise of sympathetic understanding."

Mr. Sturgis touches at length upon the ideals of his Institute, and concludes : "As I began, so I cannot but close—with the situation which dominates us to-day. If, in the march of events, we are destined to profit by the War, let us see to it that it is not materially but spiritually ; not in increased business and foreign trade, but in a clearer understanding of the absolute interdependence of the peoples of the world, and the obligation on all to serve his fellow-man. Our hope and prayer is that the glare of this war may enlighten our understanding and kindle our hearts, so that we may at the end have that sympathy which shall enable us to see only that which is true, that which is honest, that which is just ; and give our help to establish a peace founded on forbearance and governed by the highest standards of integrity and honour."

R.I.B.A. Record of Honour : Fifth List.

This Record is intended for the names only of Members, Licentiates, and Students R.I.B.A. who are actually on War Service. The following is the Fifth List :

FELLOWS.

Bone, C. B. : Captain, 4th Reserve Battalion Devon Regiment.
 Dick, Robert Burns, President Northern Architectural Association : Tynemouth Royal Garrison Artillery.
 Fraser, Gilbert, President Liverpool Architectural Society : Lieutenant, 1st City Bn. King's (Liverpool) Regiment.
 Lucas, R. M. : Motor Ambulance Corps.
 Mackenzie, A. G. R. : London Scottish.
 Thomas, Sir A. Brumwell : Lieutenant, Army Service Corps.

ASSOCIATES.

Ainsworth, John Cooper : R.N.V.R., Anti-Aircraft Corps.
 Brownrigg, A. H. : Lieutenant, Royal Marines.
 Burnett, A. S. : 5th Battalion Hants Regiment.
 Capper, Professor S. H. : Territorial, serving in Egypt.
 Cranfield, Sydney W. : Captain, Middlesex Regiment (Terr.).
 Cromie, Robert : Royal Army Medical Corps.
 Crone, Harold : Second Lieutenant, Royal Engineers.
 Davies, W. J. : Chief Petty Officer, R.N.V.R., Anti-Aircraft.
 Dobson, Walter E. : Motor Ambulance, British Red Cross.
 Edwards, Hewlett : R.N.V.R., Anti-Aircraft Corps.
 Fisher, Stanley Howe : Inns of Court O.T.C.
 Gibbons, J. Harold : Driver, Honourable Artillery Company.
 Gray, James Harry : Anglo-Belgian Ambulance Corps.
 Hadwen, Noël W. : Second Lieut., Duke of Wellington's Reg.
 Harrison, W. H. : East Lanes. (Terr.).

Heppen, F. H. : Lce.-Corpl., 8th Batt. Worcester Regiment.
 Home, G. W. : Artists' Rifles.
 Howitt, T. C. : Lieutenant, 9th Leicestershire.
 Jardine, H. S. : Private, London Scottish.
 Jelley, F. R. : R.A.M.C.
 Jessop, Bernard : Second Lieutenant, 8th Battalion Yorkshire Regiment.
 Langman, Herbert : Royal Engineers.
 Notley, Albert Carr : Artists' Rifles.
 Petch, E. S. : 4th Royal Scots.
 Powell, Herbert Cecil : R.N.V.R., Anti-Aircraft Corps.
 Rhodes, Thomas Herbert : R.N.V.R., Anti-Aircraft Corps.
 Roberts, William John : R.N.V.R., Anti-Aircraft Corps.
 Rolley, Horace Edwin : R.N.V.R., Anti-Aircraft Corps.
 Rutter, W. Arthur : R.N.V.R., Anti-Aircraft Corps.
 Scott-Willey, H. H. : R.N.V.R., Anti-Aircraft Corps.
 Smithers, Alec : H.A.C.
 Wadlington, H. G. : Duke of Lancaster's Own Yeomanry.
 Ward, William Henry : Lieutenant, 10th (Service) Battalion West Yorks Regiment.
 Warren, Henry George : R.N.V.R., Anti-Aircraft Corps.
 Webster, F. C. : London Scottish.
 Williams, Geoffrey Hyde : Inns of Court O.T.C.
 Wills, Gerald Berkeley : Inns of Court O.T.C.

Mr. Joseph Garnet Hands, whose name appears in the Third List, is serving with the Artists' Rifles.

LICENTIATES.

Bowie, G. P. : Sergeant, 5th Battalion, 2nd Infantry Brigade, Canadian Exped. Force.
 Burnley, Tom : 2nd London R.A.M.C.
 Cameron, R. M. : Captain, 4th Reserve Battalion, Royal Scots.
 Croft, Christopher : O.T.C.
 Floyd, F. H. : 19th Battalion Royal Fusiliers.
 Fowler, Reginald H. : Captain, 5th Battalion Lincolnshire Regiment.
 Grey, George W. : 2nd Lieutenant, 14th R.W.F.
 Hibbert, Arnett : Infantry Battalion, H.A.C.
 Hout, John Winnall : R.N.V.R., Anti-Aircraft Corps.
 Jackson, T. Gordon : R.N.V.R., Anti-Aircraft Corps.
 Johnson, W. H. : R. E., Temporary Divisional Officer.
 Law, C. Orlando : 3rd Hussars (King's Own).
 Oglesby, Robert P. : R.E., Hon. Lt. and Inspector of Works.
 Phillips, A. M. : Captain, 8th King's Own Yorkshire L.I.
 Pullin, H. C. : Rifle Brigade.
 Reekitt, Frank Norman : Captain, 9th Battalion Duke of Cambridge's Own (Middlesex Regiment).
 Reeves, A. Seymour : 2nd London Sanitary Co., R.A.M.C.
 Roe, G. A. M. : Captain, 5th East Surrey Regt.
 Thomson, David : Chief Petty Officer, R.N.V.R., Anti-Aircraft Corps.
 Watson, William Ernest : Lieut., 1st City of London R.F.A.

Mr. Thomas Hethorn Cunliffe, whose name appeared in the First List, is now serving as Lieutenant-Colonel of the 9th Battalion Manchester Regiment.

A list of 31 Students is held over for the next issue.

Architects at the Front: Killed in Action.

We regret to announce that the following architects have been killed in action:

Piper James Carey, 1st Battalion London Scottish, Member of the Society of Architects, L.C.C. Architectural Staff.
 Bugler M. S. Bryce, 14th County of London, L.C.C. Architectural Staff.

East African Architects at the Front.

Mr. Harold E. Henderson, *Licentiate*, Hon. Secretary of the East African Institute of Architects, writes from Nairobi under date 15th December:—

"I have just returned from the front, and received

the R.I.B.A. JOURNAL. I note on page 649 that you ask for names of Members and Licentiates of the Institute who have responded to the call of duty and are serving their country.

"I think it will be a record when I assure you that every architect and every architect's assistant in the Protectorates of British East Africa and Uganda have volunteered in some corps or another of His Majesty's forces, and the majority of them have actually been to the front, repelling the incursions of the Germans into British East Africa.

"A month after war was declared, in a camp on the Serengati Plain, on the borders of British and German East Africa, there were present the President, the Treasurer and Hon. Secretary, two Members of the Council, and four ordinary members of the East African Institute.

"The only members of the R.I.B.A. in this country are the following Licentiates, who have all volunteered:

Charles Ernest Jackson, Uganda Volunteer Corps.
 Charles Marion Melville Leggett, Uganda Volunteer Corps.
 John Myers,* East African Mounted Rifles.
 Harold Edgar Henderson,* East African Pioneer Corps (Engineers).
 Herbert Lambert Geeson,* East African Rifles.

"Those marked with an asterisk have actually been to the front."

An Associate with the Machine Gun Section, Hong Kong.

Mr. A. G. Warnham Tickle [A.] of the Public Works Department, Hong Kong, writes:—

With regard to the war, I joined the Machine Gun Section, Civil Service Co., Hong Kong Volunteers, some months back. At the beginning of August strenuous efforts were made to get all eligible men to join the Volunteers. There were strong rumours of a Chinese Revolution, but not while the heavy rains last, as John Chinaman cannot do anything in wet weather—not even fight. It is amusing in the streets to see the natives on wet days take off their shoes and carry them, whilst they slop through the mud and slush barefoot.

Hong Kong was placed under martial law; all Volunteers and Reserves were mobilised with full equipment in twelve hours. We spend our time in barracks, and under canvas on Stonecutter Island (where we have a number of German prisoners). It was terribly hot work under the August sun, marching in full kit, making trenches, and fixing up barbed wire entanglements, with the temperature at 120 degrees. We wear our uniforms all the time; at business during the day, and sleep in them at night. We have had several of our men in hospital; one unfortunately died, and we buried him with military honours.

Sentry duty in the bush at night is rather interesting; one can't see, and at the least noise one wonders where it may be from and what it is. It's not so bad at night on some of the roads, holding up motors. I was temporarily placed *hors de combat* during the early part of August with a cut foot and sprained wrist. In September we had a "full strength" route march through the Chinese quarters, as some of the natives were getting restless. Owing to the typhoon rains we were unable to continue under canvas, so we're now stationed at the City Hall.

The Artists' Rifles.

It has been decided to raise a Third Battalion of the Artists' Rifles (28th Battn. County of London Regiment) at once. The Corps is composed of Painters, Architects, Sculptors, Lawyers, Doctors, Medical Students, University Students—in fact, all classes of professional men and old Public School boys. All men coming under this category and willing to undertake the liability of Foreign Service should apply at once to the Officer Commanding the Depot, Duke's Road, Euston Road, W.C.

Appointments for Architects in France.

Several well-qualified men are required at once by the War Office to act as Inspectors of Works in France, and such appointments will carry temporary commissions and corresponding pay in the Royal Engineers. Physical fitness, a thorough knowledge of the French language, and a general knowledge of the control of labour in France, are absolutely essential, coupled with sound experience in constructive work and powers of resource and rapid decision. As these appointments will involve responsibilities in connection with the lines of communication, only thoroughly well-qualified men can be recommended. Applications should be made in writing, in the first place, to the Secretary R.I.B.A.

The New Post of Chief Town Planning Inspector to the Local Government Board.

The President of the Local Government Board has shown admirable discernment in selecting a member of the architectural profession for the newly created post of Chief Town Planning Inspector—that is to say, Chief Technical Adviser in the Town Planning Department of the Local Government Board. The business of town planning belongs to the architect. As Mr. John W. Simpson so happily puts it in the Preface to the *Transactions of the Town Planning Conference, 1910*: "The phrase 'town planning' has different meanings in different mouths. To the medical officer of health it means sanitation and healthy houses; to the engineer, trams and bridges and straight roads, with houses drilled to toe a line like soldiers. To some it means open spaces; to the policeman, regulation of traffic; to others, a garden plot to every house, and so on. To the architect it means *all* these things, collected, considered and welded into a beautiful whole. It is his work, the work of the trained planner, to satisfy all the requirements of a town plan, and to create in doing so a work of art." Mr. Herbert Samuel's choice for the post has fallen upon Mr. Raymond Unwin [F.], whose labours in this branch of art have won for him universal recognition as an authority. Three editions of Mr. Unwin's book *Town Planning in Practice* have been issued, and translations in German and Hungarian have been published. He is Special Lecturer on Civic Design and Town Planning in the University of Birmingham, Hon. Secretary of the R.I.B.A. Town Planning Committee, Lecturer on Town Planning for

the Architectural Association, Vice-President of the Town Planning Institute, member of the Departmental Committee which prepared a Report for the Board of Agriculture on Buildings for Small Holdings, member of the Advisory Departmental Committee of the Board of Agriculture on Labourers' Cottages, and member of the Departmental Committee of the Local Government Board on Building By-laws. Mr. Unwin was the organiser of the R.I.B.A. Town Planning Exhibition held at the Royal Academy in connection with the Conference of 1910. He has been Town Planning Adviser to the Admiralty in connection with the development of Rosyth, and for King's College, Cambridge, in connection with the Ruislip Town Planning Scheme. He has visited the City of Halifax, Canada, to advise the authorities on the town planning there. His works at home include Earswick Village (plan and buildings), Letchworth Garden City (plan and buildings, including Howard Hall and Estate Office), and Hampstead Garden Suburb (plan and many buildings). Mr. Lanchester, when reading the Paper on Civic Development Survey, printed elsewhere in this issue, took occasion to congratulate the Government on their choice of an adviser, and also Mr. Unwin on his taking up the position. The whole community, he remarked, would now reap the benefit of Mr. Unwin's many years' arduous study of Civic Design and Town Planning.

Civic Development Survey.

Mr. Lanchester's Paper, "Civic Development Survey as a War Measure," printed elsewhere in this issue, attracted an appreciative audience at the Institute on the 17th ult. The meeting had been convened by the Architects' War Committee, and the fine collection of drawings got together to replace a portion of Professor Geddes' lost Exhibition [see *JOURNAL*, 19th December, page 93] served as illustrations to the Paper, and made a very interesting side show. A suggestive discussion followed, being contributed to by Mr. Raymond Unwin, Mr. W. R. Davidge, Mr. V. Bell, and Mr. George Hubbard, F.S.A., Chairman of the meeting.

Award of the Ashpitel Prize, 1914.

On the recommendation of the Board of Architectural Education the Council have awarded the Ashpitel Prize for 1914 to Mr. George Eric Francis, as "the candidate who has most highly distinguished himself in the Examinations held during 1914."

New Election; Obituary.

At the Business Meeting last Monday Mr. PERCIVAL MITCHELL WARE, who passed the Qualifying Examination last July, was the only candidate for membership and was duly elected Associate.

At the same meeting the decease was announced of Edwin Arthur Johnson, of Abergavenny, *Fellow*, elected 1899, and William Newton Dunn, elected *Associate* 1882, *Fellow* 1906.

THE EXAMINATIONS.

Preliminary.

The Preliminary Examination, qualifying for registration as Probationer R.I.B.A., was held in London and the under-stated provincial centres on the 24th and 25th November 1914. Of the 70 candidates admitted, 25 were exempted from sitting, and the remaining 45 examined, with the following results:—

Centre.	Number Examined.	Passed.	Relegated.
London	22	12	10
Cardiff	2	—	2
Birmingham . .	3	1	2
Leeds	3	3	—
Liverpool	3	2	1
Manchester	11	6	5
Newcastle	1	—	1
	45	24	21

The passed and exempted candidates—numbering 49 altogether—are as follows:—

ADAMS: George Eric, Yorecroft, Ripon, Yorks.
 ADAMS: Henry Augustus Davis, "Invermeath," Holywell Avenue, Monkseaton, Northumberland.
 AMBLER: Harry James, 18 Devonshire Mews East, Portland Place, W.
 BAILEY: Clarence Howard, 62 Coggeshall Road, Braintree.
 BANNISTER: Harry, 65 Edith Grove, Fulham Road, S.W.
 BENNETT: James, c/o Messrs. John Burnet & Son, 239 St. Vincent Street, Glasgow.
 BENNETT: Walter James, Rigmund, Buchanan Gardens, St. Andrews, Fife.
 BEVILLE: Alfred Geoffrey, 7 Downshire Hill, Hampstead.
 BUCHANAN: Allan P., 274 Renfrew Street, Glasgow.
 BULSTRODE: Stanley Godwin, "Vectis," Bishop's Waltham, Hants.
 CARTWRIGHT: William Frederick, 20 Cambridge Street, Loughborough, Leicestershire.
 CASSIDY: Gerald Austin, 4 Clarendon Street, Preston.
 CHAPMAN: Fred William, "Fairfield," Tapton Crescent Road, Sheffield.
 CLARK: Harold Goundry, Summerhill, Abbey Road, Darlington.
 CRAWLEY: Albert, c/o H. H. Dunn, Esq., St. Peter's Churchyard, Silver Street, Lincoln.
 ELLIOTT: Charles C., 18 Station Street East, Coventry.
 FARRIER: Archibald Victor, 222 Canbury Park Road, Kingston-on-Thames.
 FORGIE: Alex. Garden, 33 Summerside Place, Leith, Scotland.
 GAMON: Charles Stott, Rossmore, Neston, Cheshire.
 GENNER: Leopold John Ellacott, "Mayfield," Blenkarne Road, Wandsworth Common, S.W.
 GORDON: Percy James, 8 Mecklenburgh Street, W.C.
 GREASLEY: John Nigel, "Clovally," Wentworth Avenue, W. Southbourne, Hampshire.
 HAIRD: Tom William, 56 Wilberforce Road, Leicester.
 HAMILTON: Andrew Blayney, Bloomsbury Club, Cartwright Gardens, Tavistock Square, W.C.
 HOWELL: Norman Asquith, 14 Glebe Road, Reading.
 HULME: Frank Victor, 1 Clare Street, Harriseahead, Stoke-on-Trent, Staffordshire.
 JONES: Frederick William, Town Hall, Rochdale.
 KELLER: Cecil Frederick, Edgchill, Winchester.
 KOCH: Martin Douglas Niel, St. Saviour's Vicarage, Eton Road, Hampstead, N.W.
 LOVELL: Jack Pritchard, 56 Molineux Street, Derby.
 LOWE: Joseph Samuel, 127 Claremont Road, Moss Side, Manchester.
 MILLARD: Joseph Arthur, 8 Wiltshire Road, Brixton, S.W.

MITCHELL: Cyril Hawthorn, c/o Messrs. Bond & Batley, 115 Gower Street, W.C.
 MITCHENER: Wallace George, "The Haven," 28 Montpelier Rise, Woodstock Avenue, Golder's Green, N.
 NUNN: John Price, 91 Camp Street, Lower Broughton, Manchester.
 PEEL: Arthur, Church Street, Stavely, Chesterfield.
 PIDDUCK: John Cliffe, Grove House, Alsager, Cheshire.
 REMNANT: Eustace Archibald, 185 Croydon Road, Anerley.
 ROBERTS: Kenneth Morris, 4 Vanbrugh Park Road, Blackheath, S.E.
 ROGERS: William Jelf, 152 Stow Hill, Newport.
 SMITH: George Arthur, 23 Alexandra Road, Hull.
 STOKES: Leslie Richard, Bridge House, Beaconsfield.
 SUGDEN: Howard Davey, Sunnyside, Peel Moat Road, Heaton Moor, Stockport.
 TANSLEY: Harry, 15 Stuart Street, Leicester.
 THOMAS: Frederick Leonard, Taunton School, Taunton.
 THOMAS: Lionel George Theophilus, Perse School House, Glebe Road, Cambridge.
 TRILLIA: Richard Simons, 16 Richmond Terr., Clifton, Bristol.
 WATSON: Harold, Newall Carr, Otley.
 WILSON: Reginald Alex. Gibson, 259 Oxford Street, Swansea.

Intermediate.

The Intermediate Examination, qualifying for registration as Student R.I.B.A., was held in London and the under-stated provincial centres from the 20th to the 27th November 1914. Thirty-four candidates were examined, with the following results:—

Centre.	Number Examined.	Passed.	Relegated.
London	12	6	6
Belfast	1	1	—
Cardiff	3	2	1
Leeds	4	1	3
Liverpool	1	—	1
Manchester	10	7	3
Newcastle	3	2	1
	34	19	15

The passed candidates are as follows, the names being given in order of merit as placed by the Board of Architectural Education:—

LLOYD: Albert Peregrine [P. 1911]; 5 The Promenade Swansea.
 DARTNALL: James Ambrose [P. 1910]; Forest House, High Stone, Leytonstone, N.E.
 HELLIWELL: Henry Cartwright [P. 1912]; 74 Plymouth Grove, C. on M., Manchester.
 STEWART: Cuthbert Bertram [P. 1912]; 29 Stanhope Road, Darlington.
 FENNER: Leslie [P. 1909]; 63 Laburnum Avenue, The Garden Village, Hull.
 MITCHELL: Cyril Hawthorn [P. 1914]; c/o Messrs. Bond & Batley, 115 Gower Street, W.C.
 WESTON: Kingsley Vale [P. 1912]; 19 Epperstone Road, West Bridgford, Nottingham.
 KNIGHT: Douglas Edward [P. 1912]; 29 Millicent Road, West Bridgford, Notts.
 CLAYTON: Gerald Rupert [P. 1912]; 2 Oozehead Lane, Blackburn.
 COTTINGHAM: Garnet Reginald [P. 1912]; 37 Vernham Road, Plumstead, Woolwich, S.E.
 EVANS: Henry Goronwy [P. 1912]; 5 North Parade, Carmarthen.
 PROFFITT: George Wallace [P. 1912]; Memorial Road, Walkden, nr. Manchester.
 ROBERTS: Evan Wendell [P. 1911]; Railway Inn, Penclawdd, Swansea.
 SCOTT: Noël E. [P. 1913]; 6 Summerhill Terrace, Wellington Road, Cork, Ireland.

SPENCE: William Needham [P. 1913]; "Lithgow," Oakley Road, Ranelagh, Dublin.
 STEWART: Adam Knowles [P. 1913]; Creeve, Loughgelly, Co. Armagh.
 STREADWICK: Vernon James [P. 1913]; 47 Trent Road, Brixton Hill, S.W.
 WILSON: Robert, jun. [P. 1909]; Almalca, Falkirk.
 WOOD: Arthur George [P. 1913]; The Parsonage Farm, Brenchley, Kent.

The number of failures among the relegated candidates in each subject of the Intermediate Examination was as follows:—

A. Principal Styles and General History of Architecture	7
B. 1. Simple Applied Construction	9
B. 2. Theoretical Construction	10
C. 1. Historical Architecture	3
(a) Greek and Roman	1
(b) Byzantine and Romanesque	—
(c) French and English Gothic	1
(d) Italian, French, and English Renaissance	—
C. 2. Mathematics and Mechanics	—
C. 3. Design	4

Exemptions from the Intermediate.

The following Probationers, trained at the Schools mentioned and possessing the Certificates required under the regulations, were exempted from sitting for the Intermediate Examination, and have been registered as Students R.I.B.A.:—

BENNETT: James [P. 1914]; c/o Messrs. John Burnet & Son, 239 St. Vincent Street, Glasgow. [Glasgow School of Architecture.]
 BROWN: James McLellan [P. 1913]; Green Street, Stonehouse, Lanarkshire. [Glasgow School of Architecture.]
 BURNET: Edith Mary Wardlaw [P. 1913]; 59 Queen's Road, Aberdeen. [Aberdeen School of Architecture.]
 DERRY: Douglas Charles Lawford [P. 1912]; 62 Redington Road, Hampstead, N.W. [Architectural Association School of Architecture.]
 DUNCAN: Ronald Aver [P. 1907]; 31 Glebe Place, Chelsea. [Architectural Association School of Architecture.]
 FISHER: Henry Nettleton [P. 1910]; 84 Hungerford Road, Camden Road, N. [London University School of Architecture.]
 GORDON: Percy James [P. 1914]; 8 Mecklenburgh Street, W.C. [Sydney Technical College.]
 HAMILTON: Andrew B. [P. 1914]; Bloomsbury Club, Cartwright Gardens, Tavistock Square, W.C. [Architectural Association School of Architecture.]
 KOCH: Martin Douglas Niel [P. 1914]; St. Saviour's Vicarage, Eton Road, Hampstead, N.W. [Architectural Association School of Architecture.]

In accordance with the special concession granted by the Council to Probationers on military service—viz., "Candidates for the Intermediate Examination whose Testimonies of Study are approved, to be registered as Students"—the following Probationers have been exempted from sitting for the Intermediate Examination and have been registered as Students R.I.B.A.:—

AITKEN: James Hunter [P. 1912]; Biddles Farm, Farnham Royal, Slough.
 ALLEN: George Alfred [P. 1909]; 34 Jaffray Road, Bromley, Kent.
 CLIFTON: Edward Noel [P. 1913]; 7 East India Avenue, E.C.
 CUNDALL: Philip Henry [P. 1913]; "E" Company, 4th Public Schools Battalion, Royal Fusiliers, Leatherhead.
 CURWEN: John Spedding [P. 1909]; c/o J. F. Curwen, Esq., 24 Highgate, Kendal.

DAVIS: Harold Sidney [P. 1911]; "Amalfi," Tankerton Road, Whitstable.
 EVELEIGH: Graham Tom [P. 1911]; 7 Northfield, Bridgewater, Somerset.
 FISHER: Kenneth John [P. 1907]; 1 Comely Bank Road, Egremont, Cheshire.
 JEFFREYS: Harold Murton [P. 1911]; 127 High Street, Maldon, Essex.
 JONES: Charles Frederick [P. 1911]; 9 Howard Gardens, Cardiff.
 MULLINS: Geoffrey Thomas [P. 1912]; 18 West Heath Avenue, Hampstead, N.W.
 PITE: Robert Wm. [P. 1911]; 13 Elm Grove Road, Ealing, W.
 RIX: Alec Donald [P. 1911]; London House, Acle.
 RUDMAN: Walter [P. 1911]; "Lalcham," Clarence Road, Clapham Park, S.W.
 SNEEL: Alfred [P. 1911]; Church Street North, Liskeard.
 VERGETTI: Robert George [P. 1912]; 7 Walter Road, Swansea, South Wales.
 WILKINSON: Walter George [P. 1910]; 23 Oppidans Road, Primrose Hill, Hampstead, N.W.

Final and Special.

The Final and Special Examinations, qualifying for candidature as Associate R.I.B.A., were held in London from the 3rd to the 11th December 1914. Of the 42 candidates examined, 17 passed, and the remaining 25 were relegated. The successful candidates, given in alphabetical order, are as follows:—

ABERCROMBIE: Leslie Patrick [Special]; The University, Liverpool.
 BARROW: Thomas Henry [S. 1908]; 100 Shenley Road, Camberwell, S.E.
 BASTA: Habib [Special]; 17 Endymion Terrace, Finsbury Park, N.
 BROWNAGGREE: Naserwanji Mancherji [S. 1911]; 1 Gordon Place, Gordon Square, W.C.
 BOTHWELL: Edwin Forbes [S. 1911]; "Blackhall," 211 Romford Road, Forest Gate, Essex.
 CARMICHAEL: David Arthur [S. 1914]; Netherton, Greenock, N.B.
 DAVISON: William Robert [S. 1910]; Longhirst Brooks, Morpeth.
 FRANCIS: George Eric [S. 1912]; 115 Newlands Park, Sydenham, S.E.
 GEORGE: Thomas [S. 1913]; 1 Okus Road, Swindon, Wilts.
 GRIBBON: Blakeley Rinder [S. 1904]; Windsor Terrace, Garforth, near Leeds.
 JENKINS: Trevellyn Phillip [S. 1910]; 276 Oxford Street, Swansea, Glam.
 JEPSON: Henry Norman [S. 1910]; 13 Chatham Road, Kingston-upon-Thames.
 MEREDITH: Edward [S. 1912]; Tyllwyd, Newbridge-on-Wye.
 OWEN: Albert Henry [S. 1909]; 71 Marlborough Road, Upper Holloway, N.
 SOPER: Stanley George [S. 1912]; 50 Woodville Road, Golder's Green, N.W.
 TRISCOTT: Harris Stephens [S. 1911]; 2 Iverson Road, Brondesbury, N.W.
 WILSHIRE: Reginald Sharman [S. 1912]; 60 Trinity Road, Chelmsford, Essex.

The number of failures among the relegated candidates in each subject of the Final Examination was as follows:—

A. Design	20
B. Construction—	
(1) Foundations, Walls, Roofs, &c.	14
(2) Iron and Steel	15
C. Hygiene	11
D. Properties and Uses of Building Materials	5
E. The Ordinary Practice of Architecture	8
F. The Thesis	1

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